TRANSACTIONS OF THE NEW YORK SURGICAL SOCIETY.

Stated Meeting, April 25, 1900.

The President, B. FARQUHAR CURTIS, M.D., in the Chair.

GRITTI'S AMPUTATION.

DR. A. B. JOHNSON presented a man, forty-six years old, who, when he was thirteen years of age, was severely scalded on the lower part of the right leg. This healed in the course of time, but left a large cicatrix. Some ten years ago the cicatricial tissue began to show evidences of disturbed nutrition, and finally ulcerated; the ulceration resisted treatment, and gradually spread until it became very extensive, extending from just above the ankle to above the middle of the leg, and more than half surrounding the limb. About November, 1899, the patient first noticed that the character of the process on the surface of the ulceration had changed, and that, instead of being more or less excavated, it had commenced to grow actively and projected above the surface of the healthy skin. When Dr. Johnson first saw him, early in January, 1900, there was an area, larger than a man's hand, which was covered by indurated tissue, quite firm and hard, bleeding rather readily, and presenting all the characters of an epithelioma. This diagnosis having been confirmed by a pathological examination of a section of the tissue, Dr. Johnson said he decided to amputate the leg at the knee, as there were no enlarged glands in the groin and the tissues of the thigh were apparently not involved. A Gritti amputation was done on January 20, the patella being secured to the lower end of the femur by means of numerous catgut sutures. Thus far, the speaker said, the result of the operation has been entirely satisfactory; the wound healed without any trouble, and the stump is sound and insensitive.

Dr. Johnson said that in doing the Gritti operation he has

sometimes felt in doubt as to whether it would not be wise to employ a more secure method than mere suturing in order to hold the patella in place. In former years he used a nail for this purpose, but, as this sometimes gave rise to trouble, he has more recently relied upon the insertion of an abundance of catgut sutures.

In reply to a question as to what advantages the Gritti operation possessed over other knee-joint amputations, Dr. Johnson replied that one advantage, theoretically, was that it left a stump which was firmly supported by bone and covered by skin which was normal, movable, and tolerably accustomed to pressure. The stump is certainly more resistant to mechanical pressure than the usual cicatricial stump, and gives rise to far less pain and tenderness. In at least two cases which had come under his observation, the patients, after a Gritti amputation, had been able to sustain the weight of the body on the stump without pain.

Dr. Charles N. Dowd spoke of the comparative rarity of epithelioma of the leg. In one such case coming under his observation, amputation was followed by the occurrence of metastases in the spinal cord and death.

Dr. Johnson, in reply to a question, said he had seen five or six cases of epithelioma of the leg following chronic ulceration.

Dr. B. F. Curtis said he had seen several cases of epithelioma following chronic ulceration. He asked Dr. Johnson whether there would be any difficulty in fitting an artificial limb to the stump left after a Gritti amputation. The stump is so long that it might prove difficult to fit an artificial knee-joint to it.

Dr. Johnson said that the patient he had shown was now being fitted with an artificial limb, and he had seen several similar cases where this had been done satisfactorily. The speaker said that perhaps the chief drawback to the Gritti amputation is that firm union may fail to take place between the patella and femur, and in such a case the former is gradually drawn away by the quadriceps extensor.

MASSAGE IN THE TREATMENT OF RECENT PERIARTICULAR FRACTURES.

Dr. George Woolsey read a paper with this title, for which see page 351.

Dr. Theodore Dunham inquired whether Dr. Woolsey

thought it would be advantageous to employ massage after osteotomy on rachitic children; for example, in cases of knock-knee, where bony union is often delayed and feeble. Whether we could hope to get firmer union by massage, and at the same time improve the general condition of the children by getting them on their feet sooner.

DR. CURTIS said it seemed to him that the method of treating fractures which had been described by Dr. Woolsey had recently been gaining ground, and experience was fast accumulating which would enable us to estimate its true value. The speaker said he had seen two cases in which union was apparently delayed on account of what was probably too vigorous massage. One was a case of fracture of the external malleolus; union failed to occur after a month's treatment by massage, and it became necessary to immobilize the joint for three weeks longer.

Dr. Curtis said he believed that any great amount of motion between the fragments tended to delay the healing of a fractured bone. In several cases of fracture which had come under his observation, where the splint support was defective and the limb was not firmly held, allowing free motion between the fragments, non-union resulted. At any rate, no other reason for the non-union could be made out.

DR. WOOLSEY, in closing, said he thought massage could be safely and advantageously applied in the class of cases referred to by Dr. Dunham, after the osteotomy wound had healed. The delay caused by this would not interfere with the success of the treatment.

The speaker said he had recently seen two cases of malleolar fracture which were treated by massage and resulted in non-union. In both instances the fracture was situated low down, and these cases, as a rule, heal slowly, on account of the poor blood supply of the distal fragment. The cause of non-union is almost invariably due to the application of too vigorous massage, or of the passive motion which should always follow massage. The movements transmitted to the fracture should be so slight as to produce no pain; that is a safe rule to go by.

FIBROMA PLUS TUBERCULOSIS OF THE BREAST.

DR. A. B. JOHNSON presented a specimen obtained from a woman, forty-six years old, who came under his observation

two weeks ago. She stated that fifteen years ago, following childbirth, there was a retention of milk or one of the ordinary phenomena of that period, and this was followed by more or less induration of the breast. Two years ago the patient first noticed a lump or tumor in the centre of the breast, which gradually increased in size, especially during the past few months. When Dr. Johnson first saw the tumor it was about six inches in its transverse diameter, and its centre was surmounted by an ulcerating surface, about two inches in diameter, which represented the nipple. The growth was hard and insensitive. It seemed to be quite firmly attached to the skin, and moderately so to the deeper structures of the thorax. The axillary glands were decidedly enlarged. The growth was regarded as a rapidly growing cancer which had been neglected, and two weeks ago it was removed by the most radical operation. Dr. Johnson said that while dissecting out the skin flaps he noticed that there was a peculiar infiltration of the subcutaneous tissue, and on this account he made the flaps as thin as he dared, removing a large section of the skin and thoroughly cleaning out the axilla.

Under the microscope, the tumor proved to be a very rapidly growing intracanalicular fibroma. The nipple was also in the same condition, the fibrous tissue being greatly increased in amount. In addition to the tumor, it was noted also that the mass was studded throughout with miliary tubercles. The axillary lymph-nodes were very distinctly tuberculous and in a condition of caseation. It was assumed that the tuberculous process resulted from a secondary infection, probably through the nipple.

Dr. Johnson said that, in spite of the fact that so much skin was removed, the tuberculous process had again become manifest, the wound already being surrounded by a zone of indurated, inflammatory tissue over two inches wide and rapidly spreading. The patient's general health is very good, but, on account of the active character of the tubercular process, her condition is almost a hopeless one, a further operation being out of the question.

Stated Meeting, May 9, 1900.

The President, B. FARQUHAR CURTIS, M.D., in the Chair.

EXCISION OF TESTIS, EPIDIDYMIS, VAS AND SEMINAL VESICLE FOR TUBERCULOSIS.

DR. PERCY R. BOLTON presented again a patient, whom he had shown at a meeting of the Society some months before, after removal of the left kidney for a tuberculous nephritis.

The man, forty years old, was readmitted to Bellevue Hospital on February 10, 1900, suffering from an enlargement of the scrotum. Examination revealed the fact that the left testis was considerably increased in size, and was hard and nodular. The vas and seminal vesicle on the corresponding side were also enlarged.

On March 9, Dr. Bolton operated by the following method: Two incisions were made, one, four inches long, over the left inguinal canal, through which the vas was excised from the cord. The incision was then lengthened and the testis, epididymis, and proximal end of the vas brought into view and removed. The vas was then followed down into the pelvis and cut off as low as possible, both ends being tied before cutting. The opposite epididymis was then pushed through into the scrotal wound and a portion of it excised. The vas on that side looked normal. The wound was closed as after a Bassini operation for inguinal hernia, chromic acid catgut being used for the deeper sutures and black silk for the skin.

A curved perineal incision, with its convexity upward, was then made, the left seminal vesicle found and isolated, and then removed, the ligated end of the vas coming with it.

The patient made an uneventful recovery. A tube was inserted through the perineal wound, and allowed to remain there until March 15. Five days later the patient was passing all his urine by way of the urethra.

The pathologist reported that the testis and epididymis which had been removed contained many areas of cheesy degeneration surrounded by miliary tubercles. The testis was studded with many miliary tubercles.

TUBERCULOSIS OF THE BODY OF THE SIXTH CERVICAL VERTEBRA CURED BY TREPHINING.

DR. OTTO G. T. KILIANI presented a woman, twenty-eight years of age, who was first seen by him early in January of this year in consultation with Dr. Schwyzer. The family history was positive as to tuberculosis. She herself had had a catarrh of the apex of both lungs, which had healed. Since twenty months she had complained of severe pain in the back of the neck, which was increased by pressure on the processus spinosus of the fifth, sixth, and seventh vertebræ. Lately, the pain had also involved the plexus brachialis of the right side. It finally became so severe that she was unable to sleep or do any work. Motion of the neck was never hindered. The diagnosis of tuberculosis of the vertebra was made, and was verified by a Röntgen plate, in which, for anybody accustomed to studying Röntgen plates, it is easy to see an unmistakable bean-shaped shadow over the right side of the body of the sixth vertebra, which the reporter regarded as a tuberculous focus. The operation of trephining the body of the sixth vertebra was proposed and accepted. With Dr. Willy Meyer kindly assisting, on the 9th of February, 1900, at the German Hospital, he made an incision along the lateral edge of the sterno-cleido muscle. It was comparatively easy to work down to the processus transversus, and from there to the body of the vertebræ, avoiding the vessels and nerves. The œsophagus was lifted from the anterior ligament, which was incised and pushed aside. The body of the sixth vertebra proved to be so soft by fatty degeneration, that the trephining was done with the sharp spoon. No pus or granulations were found. The fifth vertebra was also trephined, but there the hand-chisel had to be used with considerable force. Iodoform gauze tampon was drawn out of the lower angle of the wound, the upper part being sewn up. After four days the pain in the vertebræ was considerably less, and that in the arm began to gradually subside. Recovery was uneventful. After six weeks, plaster-of-Paris corset with jury-mast, which was left off ten weeks after operation. The fistula proved to be somewhat persistent, and showed typical tuberculous, spongy granulations of glassy character. Iodoform gelatin bougies proved to be of value, and the fistula is now closing. Tubercle bacilli were never found in the bone removed.

DR. B. F. CURTIS asked if the microscope showed any definite changes to confirm the diagnosis? The sudden relief from pain in the case reported by Dr. Kiliani was rather remarkable, and seemed to show that orthopædists were not on the right track as regards the treatment of these spinal cases, if such immediate results could be obtained by operation when the original focus was so small.

DR. KILIANI said that tubercle bacilli were not found, but there were giant cells and evidences of fatty degeneration. It was not deemed advisable to scrape off any of the granulations from the inside of the wound. Histologically, the diagnosis was positive.

Dr. Kiliani said he explained the rapid disappearance of the pain on the ground that it was due to the œdematous infiltration. It persisted, however, for some weeks after the operation.

CARCINOMA OF THE INTESTINES AND PERITONEUM.

DR. JOHN F. ERDMANN presented a boy of nineteen, who, about a year ago, began to complain of pain in the abdomen, which was aggravated upon lying down. About three months later he had some bloody stools, and was treated for dysentery for six months. He then entered the Presbyterian Hospital, where he remained for ten days.

When Dr. Erdmann first saw him in March, 1900, there was marked sensitiveness over the hepatic and splenic flexures, and in the region of the cæcum, and abdominal palpation showed a number of small nodules in those localities. A mass was also found in the rectum, about four and one-half inches from the anus. The boy stated that during his illness he had lost about fifteen pounds in weight.

An exploratory incision disclosed a small mass involving the rectum, two involving the omentum, one the cæcum, and several others in the region of the appendix. Several of them involved the peritoneum and fascia. The case was regarded as absolutely inoperable. Three specimens were removed for microscopical examination, two from the omentum and one from the appendix, and the report on all three was that it was true carcinoma.

Dr. Erdmann said that the primary tumor in this case was

probably in the rectum. Since the exploratory operation, the boy has been able to lie down without pain.

DR. L. A. STIMSON said it was rather remarkable to hear of the number of young patients who were affected with carcinoma. A few years ago it was rare to find it in patients under thirty years of age. Last year, Dr. Stimson said, he saw five cases, all under the age of thirty.

DR. ERDMANN said that two years ago he saw a patient twenty years old with carcinoma of the intestines. In that case, the speaker said, he made an artificial anus.

DR. HOWARD LILIENTHAL said that about two years ago he saw a young man about eighteen years old who had a tumor of the rectum which had been pronounced carcinomatous after a microscopical examination, and a surgeon in Chicago had advised amputation of the rectum. The boy came to New York, where Dr. Lilienthal saw him, and, on account of the age of the patient and the peculiar appearance of the tumor, another section of it was removed and submitted to the pathologist at Mt. Sinai Hospital, who reported that he could find no elements of carcinoma. Although there was no specific history, the boy was put upon energetic antisyphilitic treatment, and a perfect cure was the result. The tumor proved to be gummatous in character, and an abscess had formed within it, which had to be incised; no further operation was necessary.

DR. COLEY said that his case of carcinoma of the breast in a man twenty-nine years old, which he presented last fall, had died about two months later. In that instance the disease had developed when the man was twenty-eight years of age.

TUMOR OF THE MEDIAN NERVE.

DR. B. FARQUHAR CURTIS presented a man, twenty-one years old. When he was ten years of age, a tumor was discovered in the arm, which he says was about half the size of a hen's egg. It gradually grew larger, and when Dr. Curtis saw him recently, its size had about doubled. It was freely movable under the skin, and seemed to be attached by a pedicle to the deeper parts of the arm; otherwise, there were no adhesions nor infiltration of the neighboring parts. There was an entire absence of nerve symptoms, excepting a tingling sensation

along the forefinger; but this was only elicited on pressure or when he used the arm vigorously.

On April 27, 1900, Dr. Curtis cut down on the tumor and found that it lay in the centre of the nerve, the fibres of which were expanded over it. Upon incising the capsule, he was able to shell out the tumor from the centre of the nerve with comparative ease. No nerve symptoms developed subsequent to the operation, but the slight tingling which the patient had complained of previously still persisted. The wound healed by first intention.

The case was interesting, Dr. Curtis said, on account of the size of the tumor, developing between the nerve fibres, combined with the absolute absence of nerve symptoms. The pathologist reported that he was unable to be sure of the exact nature of the tumor. He thought it was not a sarcoma, but so rich in cells that it might prove more serious than an ordinary fibroma, and suggested it would be wise to keep the patient under observation for a time, but not to do anything more at present. The speaker said he hoped it would prove to be purely fibrous, as he was obliged to leave behind some particles of the capsule, which he dared not remove for fear of injuring the nerve fibres, and a recurrence would compel the removal of a long piece of the nerve.

NO RECURRENCE OF HERNIA EIGHT YEARS AFTER OPERATION.

Dr. William B. Coley showed a young man upon whom he had operated early in 1892 for the radical cure of an inguinal hernia by the Czerny method. The hernia relapsed within four months. In the same year he again operated, this time by the Bassini method, with tendon sutures, and thus far there has been no recurrence.

TRAUMATIC CUBITUS VARUS.

Dr. Lewis A. Stimson read a paper with the above title, for which see page 301.

Dr. Curtis said that a very common error in the diagnosis of this class of cases is that they are regarded as dislocations. The speaker said that for some years past it has been his custom in these cases to put the limb in a position of extension for the

first week or two; this appears to be absolutely necessary in the majority of cases in order to prevent lateral deformity.

A STUDY OF ONE THOUSAND OPERATIONS FOR INTESTINAL OBSTRUCTION AND GANGRENOUS HERNIA.

DR. CHARLES L. GIBSON read a paper with the above title, for which see page 486.

DR. CURTIS said the tendency nowadays was in favor of the more complete operation as compared with artificial anus in the treatment of these cases of intestinal obstruction and gangrene. The results of an artificial anus have not proved as favorable as one might imagine. In considering the statistics given by Dr. Gibson, however, the fact should be borne in mind that an artificial anus is sometimes made as a last resort in order to give the patient some relief when his condition makes it extremely probable that he will die immediately, and the high rate of mortality may thus be explained.

NON-MALIGNANT ADENOMA OF BOTH OVARIES.

DR. WILLIAM B. COLEY presented ovarian tumors with the following history:

The patient, female, aged seventy years, had been sent to him in May, 1896, for an operation for irreducible inguinal hernia. The hernia had existed for some years, but had been irreducible only a few months. The diagnosis of omental hernia was made, but on opening the sac, instead of omentum there was found a mass of small cysts exactly resembling a bunch of grapes and filled with gelatinous material. This mass was but loosely attached to the hernial sac. The sac was still patent at the neck, although the small lumen prevented a return of the contents to the abdominal cavity. The mass was about the size of a fist. Hydatids were suspected, but a careful microscopic examination proved negative. Physical examination showed a tumor, apparently solid in character and connected with the right ovary, about the size of two fists; it was freely movable. Its duration was uncertain. After leaving the hospital, the tumor in the abdomen grew rapidly until September, when the patient's condition was such that an exploratory laparotomy was done. On opening the abdomen, he found the cavity filled with a large quantity of

loose gelatinate material, very similar to that found in the hernial sac. The right ovary was the seat of a semisolid tumor about the size of a child's head. A similar tumor occupied the left ovary, but was slightly smaller in size. The serous membrane of the uterus was studded with small infiltrations closely resembling those seen in tubercular peritonitis. Much of the remaining parietal and visceral peritoneum was similarly affected. The tumors were both removed, and as much of the free gelatinous material as possible. This material nearly, if not quite, equalled in bulk the tumors of the ovaries. The patient made an uninterrupted recovery.

From the gross appearance, he had little doubt that he had to deal with a colloid carcinoma, but a careful microscopical examination was made by Dr. B. H. Buxton, who reported it to be non-malignant adenoma. He had watched the patient with considerable interest, fearing a return in spite of the pathologist's report. Her condition has remained normal up to the time of the last report, four years since operation.

POPLITEAL ANEURISM; LIGATION OF FEMORAL ARTERY; GANGRENE OF FOOT; AMPUTATION OF LEG; EMPHYSEMATOUS CELLULITIS OF STUMP; AMPUTATION OF THIGH; RECOVERY.

Dr. B. F. Curtis presented a specimen with the following history:

A man, fifty-two years of age, was admitted to St. Luke's Hospital, January 4, 1899. Is moderately alcoholic. Gonorrhœa thirty-five years ago. For four or five weeks has had pain in right popliteal space, so that he could hardly walk, and two weeks before admission he found a swelling there, which has gradually increased from the size of a bean to its present dimensions. He noticed pulsation soon after he discovered the tumor.

Patient is robust, with a florid complexion. A tubercular syphilitic eruption is on the chin. Lungs normal. Heart apex in fourth space inside of the mid-clavicular line, right border three-quarters inches to right of sternum. Sounds diminished in intensity, first sound rough, but no murmurs, no accentuation, and no tracheal tugging. Radial pulse medium size, regular, increased tension, synchronous on the two sides.

Liver normal. Abdomen normal. Posterior chain cervical

glands and right epitrochlear gland enlarged. Slight erythematous patch on left wrist. Scars on both legs, scalloped and pigmented.

Right leg swollen, measuring one and one-half inches more at calf than the left. In right popliteal space is a pulsating tumor size of a goose egg, with marked systolic thrill and bruit. Dorsalis pedis artery can be felt in both feet, but less strong on right side. The aneurism can be emptied by pressure. Urine, specific gravity 1010, acid; no albumen or sugar, or microscopic elements.

Patient was put upon iodide of potash in full doses up to fifty grains t. i. d. The knee was firmly flexed and secured by bandages, in order to prevent growth of the aneurism, codeine being given for the pain. January 24 all medication was stopped. The eruption on the face had disappeared, and the aneurism was less painful, but was still increasing in size. January 26, the right femoral artery was ligated in Hunter's canal by the usual method of tying in two places and dividing the vessel between the ligatures. Ether anæsthesia.

The operation was followed by great pain in the leg, relieved only by full doses of codeine and morphine. In forty-eight hours a few irregular blue patches were seen on the foot with anæsthesia. The temperature began to rise.

January 31, the wound was dressed and found to be healing by first intention. The gangrene extended on the dorsal surface to the ankle and on the plantar to the heel. This advanced upward until it showed the typical boundary for an occluded artery in Hunter's canal. There was no infection. Leucocytosis, 11,800; Temperature normal.

February 11, 1899, amputation of leg in upper one-third, rather close to gangrenous portion. Line of incision appeared healthy. Ether anæsthesia. The pain was relieved. The temperature became normal after a moderate rise (under 101° F.), and apparently the wound was healing well.

February 18, first dressing. There was some swelling and redness about the wound edges. The next day it was redressed, and a considerable amount of foul serum discharged. The flaps were red and œdematous, with a rather sharp limit to the inflammation just below the knee. Gaseous crepitation was felt in the tissues up to this margin. There was no pain. Temperature

from 98° to 99$^{3}/_{5}$° F., as during the entire week previous, and pulse, 84 to 100, of fair quality. Immediate operation was urged. During the five hours which elapsed before the operation could be done, the red margin and crepitation extended two inches farther up, reaching above the patella.

February 19, 1899, ether anæsthesia. Circular amputation of the thigh at its middle. The incision passed between two and three inches above the upper margin of the inflammation. The wound was closed loosely by a few silkworm-gut sutures, and both angles drained. A dressing wet with 1-3000 bichloride of mercury solution was applied. Dressed twenty-four hours later; the wound seemed clean, with very slight serous discharge, no œdema and no crepitation. The temperature had risen to 100$^{2}/_{5}$° F. at 4 P.M., and it was decided to use the antistreptococcus serum.

February 20, 9 P.M., temperature 100° F., pulse 88, ten cubic centimetres injected; February 21, 3 A.M., temperature 100$^{1}/_{5}$°, pulse 100, ten cubic centimetres injected; February 21, noon, temperature 100$^{1}/_{5}$°, pulse 100, ten cubic centimetres injected; February 21, 8.30 P.M., temperature 101°, pulse 104, ten cubic centimetres injected; February 22, 4 A.M., temperature 100$^{2}/_{5}$°, pulse 100, ten cubic centimetres injected; February 22, 11 A.M., temperature 100$^{2}/_{5}$° , pulse 88, ten cubic centimetres injected; February 22, 5 P.M., temperature 100$^{2}/_{5}$°, pulse 100, ten cubic centimetres injected; February 22, 12 P.M., temperature 100$^{3}/_{5}$°, pulse 92, ten cubic centimetres injected; February 23, 8 A.M., temperature 99$^{4}/_{5}$°, pulse 96; February 23, 4 P.M., temperature 99$^{2}/_{5}$°, pulse 90.

The temperature having dropped, no farther injections were made after February 22.

The wound was dressed twice daily; the angles carefully syringed out with peroxide of hydrogen and drained with iodoform gauze; the wet bichloride dressing was continued until February 25, when a dry dressing of sterile gauze was applied. The wound healed promptly by granulation where it was not sutured.

March 24, the patient was discharged.

The specimen shows that the upper ligature was placed about one-eighth inch below the anastomotica magna, and that a clot

formed in the end of the occluded vessel and extended upward so as to block this important branch.

The case is also interesting as it presents a recovery from that very fatal disease, emphysematous cellulitis. The bacillus aërogenes capsulatus was sought for, but not found. Undoubtedly, the infection was caused by the gangrenous tissue. The entire absence of pain and fever in spite of this severe infection is remarkable.